

<b>PATENT ASSIGNMENT COVER SHEET</b>
--------------------------------------

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT3630807

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
SEJIN OH	08/17/2015
WOOSUK KWON	09/15/2015
SUNGRYONG HONG	09/15/2015
KYOUNGSOO MOON	08/18/2015
JANGWON LEE	09/15/2015
WOOSUK KO	09/15/2015
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	LG ELECTRONICS INC.
<b>Street Address:</b>	128, YEOUNI-DAERO, YEONGDEUNGPO-GU
<b>City:</b>	SEOUL
<b>State/Country:</b>	KOREA, REPUBLIC OF
<b>Postal Code:</b>	07336
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	14893753
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(202)496-7756
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>	
<b>Phone:</b>	202-496-7500
<b>Email:</b>	mlapto@mckennalong.com
<b>Correspondent Name:</b>	DENTONS US LLP
<b>Address Line 1:</b>	1900 K. STREET, N.W.
<b>Address Line 4:</b>	WASHINGTON, D.C. 20006
<b>ATTORNEY DOCKET NUMBER:</b>	8736.01426.US00
<b>NAME OF SUBMITTER:</b>	YONG S. CHOI
<b>SIGNATURE:</b>	/Yong S. Choi/
<b>DATE SIGNED:</b>	11/24/2015
<b>Total Attachments: 6</b>	

source=ASSIGNMENT#page1.tif  
source=ASSIGNMENT#page2.tif  
source=ASSIGNMENT#page3.tif  
source=ASSIGNMENT#page4.tif  
source=ASSIGNMENT#page5.tif  
source=ASSIGNMENT#page6.tif

## Assignment of Application

WHEREAS, I (WE)	OH, Sejin; KWON, Woosuk; HONG, Sungryong; MOON, Kyoungsoo; LEE, Jangwon; KO, Woosuk		
			, respectively,
have invented certain new and useful improvements in:			
<b>APPARATUS FOR TRANSMITTING BROADCAST SIGNALS, APPARATUS FOR RECEIVING BROADCAST SIGNALS, METHOD FOR TRANSMITTING BROADCAST SIGNALS AND METHOD FOR RECEIVING BROADCAST SIGNALS</b>			
for which an application for Letters Patent was executed on			
(Application No.		, Filed	), and
WHEREAS,	<b>LG ELECTRONICS INC.</b>		
(hereinafter referred to as "ASSIGNEE") having a place of business at: 128, Yeoui-daero, Yeongdeungpo-gu, Seoul 07336, Republic of Korea			

is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent that may be granted therefore in the United States and its territorial possessions and in any and all foreign countries;

NOW, THEREFORE, in consideration of the sum of FIVE DOLLARS (\$5.00), the receipt whereof is hereby acknowledged, and for other good and valuable consideration, I (WE), by these presents do sell, assign and transfer unto said ASSIGNEE, the full and exclusive right to the said invention in the United States and its territorial possessions and in all foreign countries and the entire right, title and interest in and to any and all Letters patent which may be granted therefor in the United States and its territorial possessions and in any and all foreign countries and in and to any and all divisions, reissues, continuations, substitutions and renewals thereof.

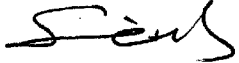
I (WE) hereby authorize and request the Patent Office Officials in the United States and Its territorial possessions and any and all foreign countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the assignee of my (our) entire right, title and interest in and to the same, for the sole use and behalf of said ASSIGNEE, its (his) successors and assigns, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held by me (us) had this Assignment and sale not been made.

Further, I (WE) agree that I (WE) will communicate to said ASSIGNEE or its (his) representatives any facts known to me (us) respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, substitute, renewal and reissue applications, execute all necessary assignment papers to cause any and all of said Letters Patent to be issued to said ASSIGNEE, make all rightful oaths, and, generally do everything possible to aid said ASSIGNEE, its (his) successors and assigns, to obtain and

Docket No.:

enforce proper protection for said invention in the United States and its territorial possessions and in any and all foreign countries.

The undersigned hereby grant(s) the firm of Dentons, 1900 K Street, N.W., Washington, D.C. 20006 the power to insert on this assignment any further identification, including the application number and filing date, which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

Date: Aug. 17, 2015   
\_\_\_\_\_  
(Signature of Inventor)  
OH, Sejin

Date: \_\_\_\_\_  
\_\_\_\_\_  
(Signature of Inventor)  
KWON, Woosuk

Date: \_\_\_\_\_  
\_\_\_\_\_  
(Signature of Inventor)  
HONG, Sungryong

Date: \_\_\_\_\_  
\_\_\_\_\_  
(Signature of Inventor)  
MOON, Kyoungsoo

Date: \_\_\_\_\_  
\_\_\_\_\_  
(Signature of Inventor)  
LEE, Jangwon

Date: \_\_\_\_\_  
\_\_\_\_\_  
(Signature of Inventor)  
KO, Woosuk

**Dentons US LLP**  
1900 K Street, N.W.  
Washington, D.C. 20006

DC 51245461.1

## Assignment of Application

WHEREAS, I (WE)	OH, Sejin; KWON, Woosuk; HONG, Sungryong; MOON, Kyoungsoo; LEE, Jangwon; KO, Woosuk		
	, respectively,		
have invented certain new and useful improvements in:			
<b>APPARATUS FOR TRANSMITTING BROADCAST SIGNALS, APPARATUS FOR RECEIVING BROADCAST SIGNALS, METHOD FOR TRANSMITTING BROADCAST SIGNALS AND METHOD FOR RECEIVING BROADCAST SIGNALS</b>			
for which an application for Letters Patent was executed on			
(Application No.		, Filed	), and
WHEREAS,	<b>LG ELECTRONICS INC.</b>		
(hereinafter referred to as "ASSIGNEE") having a place of business at: 128, Yeoui-daero, Yeongdeungpo-gu, Seoul 07336, Republic of Korea			

is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent that may be granted therefore in the United States and its territorial possessions and in any and all foreign countries;

NOW, THEREFORE, in consideration of the sum of FIVE DOLLARS (\$5.00), the receipt whereof is hereby acknowledged, and for other good and valuable consideration, I (WE), by these presents do sell, assign and transfer unto said ASSIGNEE, the full and exclusive right to the said invention in the United States and its territorial possessions and in all foreign countries and the entire right, title and interest in and to any and all Letters patent which may be granted therefor in the United States and its territorial possessions and in any and all foreign countries and in and to any and all divisions, reissues, continuations, substitutions and renewals thereof.

I (WE) hereby authorize and request the Patent Office Officials in the United States and Its territorial possessions and any and all foreign countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the assignee of my (our) entire right, title and interest in and to the same, for the sole use and behalf of said ASSIGNEE, its (his) successors and assigns, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held by me (us) had this Assignment and sale not been made.

Further, I (WE) agree that I (WE) will communicate to said ASSIGNEE or its (his) representatives any facts known to me (us) respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, substitute, renewal and reissue applications, execute all necessary assignment papers to cause any and all of said Letters Patent to be issued to said ASSIGNEE, make all rightful oaths, and, generally do everything possible to aid said ASSIGNEE, its (his) successors and assigns, to obtain and

14FCIC112US02 (hic)

Docket No.:

enforce proper protection for said invention in the United States and its territorial possessions and in any and all foreign countries.

The undersigned hereby grant(s) the firm of Dentons, 1900 K Street, N.W., Washington, D.C. 20006 the power to insert on this assignment any further identification, including the application number and filing date, which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

Date: \_\_\_\_\_  
(Signature of Inventor)  
OH, Sejin

Date: Sept. 15, 2015  
(Signature of Inventor)  
KWON, Woosuk

Date: Sept. 15, 2015  
(Signature of Inventor)  
HONG, Sungryong

Date: \_\_\_\_\_  
(Signature of Inventor)  
MOON, Kyoungsoo

Date: Sept. 15, 2015  
(Signature of Inventor)  
LEE, Jangwon

Date: Sept 15, 2015  
(Signature of Inventor)  
KO, Woosuk

Dentons US LLP  
1900 K Street, N.W.  
Washington, D.C. 20006

DC 51245461.1

## Assignment of Application

WHEREAS, I (WE)	OH, Sejin; KWON, Woosuk; HONG, Sungryong; MOON, Kyoungsoo; LEE, Jangwon; KO, Woosuk		
			, respectively,
have invented certain new and useful improvements in:			
<b>APPARATUS FOR TRANSMITTING BROADCAST SIGNALS, APPARATUS FOR RECEIVING BROADCAST SIGNALS, METHOD FOR TRANSMITTING BROADCAST SIGNALS AND METHOD FOR RECEIVING BROADCAST SIGNALS</b>			
for which an application for Letters Patent was executed on			
(Application No.		, Filed	), and
WHEREAS,	<b>LG ELECTRONICS INC.</b>		
(hereinafter referred to as "ASSIGNEE") having a place of business at: 128, Yeoui-daero, Yeongdeungpo-gu, Seoul 07336, Republic of Korea			

is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent that may be granted therefore in the United States and its territorial possessions and in any and all foreign countries;

NOW, THEREFORE, in consideration of the sum of FIVE DOLLARS (\$5.00), the receipt whereof is hereby acknowledged, and for other good and valuable consideration, I (WE), by these presents do sell, assign and transfer unto said ASSIGNEE, the full and exclusive right to the said invention in the United States and its territorial possessions and in all foreign countries and the entire right, title and interest in and to any and all Letters patent which may be granted therefor in the United States and its territorial possessions and in any and all foreign countries and in and to any and all divisions, reissues, continuations, substitutions and renewals thereof.

I (WE) hereby authorize and request the Patent Office Officials in the United States and Its territorial possessions and any and all foreign countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the assignee of my (our) entire right, title and interest in and to the same, for the sole use and behalf of said ASSIGNEE, its (his) successors and assigns, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held by me (us) had this Assignment and sale not been made.

Further, I (WE) agree that I (WE) will communicate to said ASSIGNEE or its (his) representatives any facts known to me (us) respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, substitute, renewal and reissue applications, execute all necessary assignment papers to cause any and all of said Letters Patent to be issued to said ASSIGNEE, make all rightful oaths, and, generally do everything possible to aid said ASSIGNEE, its (his) successors and assigns, to obtain and

Docket No.:

enforce proper protection for said invention in the United States and its territorial possessions and in any and all foreign countries.

The undersigned hereby grant(s) the firm of Dentons, 1900 K Street, N.W., Washington, D.C. 20006 the power to insert on this assignment any further identification, including the application number and filing date, which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

Date: \_\_\_\_\_  
(Signature of Inventor)  
OH, Sejin

Date: \_\_\_\_\_  
(Signature of Inventor)  
KWON, Woosuk

Date: \_\_\_\_\_  
(Signature of Inventor)  
HONG, Sungryong

Date: 2015.8.18 \_\_\_\_\_  
(Signature of Inventor)  
MOON, Kyoungsoo

Date: \_\_\_\_\_  
(Signature of Inventor)  
LEE, Jangwon

Date: \_\_\_\_\_  
(Signature of Inventor)  
KO, Woosuk

**Dentons US LLP**  
1900 K Street, N.W.  
Washington, D.C. 20006

DC 51245461.1